

Title (en)

ELECTROPHORETIC INSULATION OF METAL CIRCUIT BOARD CORE

Publication

**EP 0239839 B1 19921119 (EN)**

Application

**EP 87103379 A 19870310**

Priority

US 84297886 A 19860324

Abstract (en)

[origin: EP0239839A1] A printed circuit with an internal metal sheet for heat dissipation has a roughened aluminum sheet with via holes coated with acrylic or epoxy resin containing thixotropic fumed silicon dioxide or silicate clay. The resin and thixotropic agent are electrophoretically coated. The thixotropic agent may act both to even the coating around edges and as a material upon which metal plating of the printed circuit is bonded.

IPC 1-7

**C23C 28/00; C25D 15/00; H05K 3/44**

IPC 8 full level

**C23C 18/16** (2006.01); **C23C 18/31** (2006.01); **C23C 18/40** (2006.01); **C23C 28/00** (2006.01); **C25D 13/12** (2006.01); **H05K 1/05** (2006.01);  
**H05K 3/44** (2006.01); **H05K 3/18** (2006.01)

CPC (source: EP)

**H05K 1/056** (2013.01); **H05K 3/181** (2013.01); **H05K 3/445** (2013.01); **H05K 2201/0209** (2013.01); **H05K 2203/135** (2013.01)

Citation (examination)

- EP 0177686 A2 19860416 - KOLLMORGEN TECH CORP [US]
- "The Condensed Chemical Dictionary", van Nostrand Reinhold Co., New York, 1977, pages 19 and 773;
- Römpps Chemie-Lexikon, Fränkische Verlagshandlung, W. Keller & Co., 1979, pages 79 and 1155;

Cited by

EP0315905A3; CN102409385A; EP0476898A3; US5236772A; US5362359A; US7320936B2; WO2004057055A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**EP 0239839 A1 19871007; EP 0239839 B1 19921119; DE 3782674 D1 19921224; JP S62226695 A 19871005**

DOCDB simple family (application)

**EP 87103379 A 19870310; DE 3782674 T 19870310; JP 1746887 A 19870129**